

1 MKDVESGRGRVLLNSAAARGDGLLLLGTRAATLGGGGGGLRESRRGKQGA kcnq5-  
1 MKDVESGRGRVLLNSAAARGDGLLLLGTRAATLGGGGGGLRESRRGKQGA kcnq5-  
51 RMSLLGKPLSYTSSQSCRRNVKYRRVQNYLYNVLERPRGWAFIYHAFVFL kcnq5-  
51 RMSLLGKPLSYTSSQSCRRNVKYRRVQNYLYNVLERPRGWAFIYHAFVFL kcnq5-  
101 LVFGCLILSVFSTIPEHTKLASSCLLILEFVMIVVFGLEFIIRIWSAGCC kcnq5-  
101 LVFGCLILSVFSTIPEHTKLASSCLLILEFVMIVVFGLEFIIRIWSAGCC kcnq5-  
151 CRYRGWQGRRLRFARKPFCVIDTIVLIASIAVVS AKTQGNIFATSALRSR kcnq5-  
151 CRYRGWQGRRLRFARKPFCVIDTIVLIASIAVVS AKTQGNIFATSALRSR kcnq5-  
201 FLQILRMVRMDRRGGTGWKLLGSV VYAH SKELITAWYIGFLVLIFSSFLVY kcnq5-  
201 FLQILRMVRMDRRGGTGWKLLGSV VYAH SKELITAWYIGFLVLIFSSFLVY kcnq5-  
251 LVEKDANKEFSTYADALWWGTITLTITIGYGDKTPLTWLGRLLSAGFALLG kcnq5-  
251 LVEKDANKEFSTYADALWWGTITLTITIGYGDKTPLTWLGRLLSAGFALLG kcnq5-  
301 ISFFALPAGILGSGFALKVQEQHROKHFEKRRNPAANLIQCVWRSYA ADE kcnq5-  
301 ISFFALPAGILGSGFALKVQEQHROKHFEKRRNPAANLIQCVWRSYA ADE kcnq5-  
351 KSVSIATWKPHLKA LHTCSPTKKEQGEASSSQKLSFKERVMA SPRGQSI kcnq5-  
351 KSVSIATWKPHLKA LHTCSPTN-----QKLSFKERVMA SPRGQSI kcnq5-  
401 KSRQASVGDRRSPSTDITAE GSPTKVQKSWSFNDRTFRFSLRLKSSQPK kcnq5-  
392 KSRQASVGDRRSPSTDITAE GSPTKVQKSWSFNDRTFRFSLRLKSSQPK kcnq5-  
451 PVIDADTALGTDDVYDEKGCQCDVSVEDLTPPLKTVIRAIRIMKFHVAKR kcnq5-  
442 PVIDADTALGTDDVYDEKGCQCDVSVEDLTPPLKTVIRAIRIMKFHVAKR kcnq5-  
501 KFKETLRPYDVKD VIEQYSAGHLDMLCRIKSLQTRVDQILGKGQITSDKK kcnq5-  
492 KFKETLRPYDVKD VIEQYSAGHLDMLCRIKSLQTRVDQILGKGQITSDKK kcnq5-  
551 SREKITA EHEHETDDLSMLGRVVKVEKQVQSIESKLDCLLDIYQQVLRKGS kcnq5-  
542 SREKITA EHEHETDDLSMLGRVVKVEKQVQSIESKLDCLLDIYQQVLRKGS kcnq5-  
601 ASALALASFOI PPFCEQTS DYQSPVDSKDLSGSAQNSGCLSRSTSANIS kcnq5-  
592 ASALALASFOI PPFCEQTS DYQSPVDSKDLSGSAQNSGCLSRSTSANIS kcnq5-  
651 RGLQFILTPNEFS AQTFYALSPTMHSQATQVPISQSDGSAVAATNTIANQ kcnq5-  
642 RGLQFILTPNEFS AQTFYALSPTMHSQATQVPISQSDGSAVAATNTIANQ kcnq5-  
701 INTAPKPAAPTTLQIPPLPAIKHLPRPETLHPNPAGLQESISDVTTCLV kcnq5-  
692 INTAPKPAAPTTLQIPPLPAIKHLPRPETLHPNPAGLQESISDVTTCLV kcnq5-  
751 ASKENVQVAQSNLTKDRSMRKSFDMGGETLLSVCPMVPKDLGKSLSVQNL kcnq5-  
742 ASKENVQVAQSNLTKDRSMRKSFDMGGETLLSVCPMVPKDLGKSLSVQNL kcnq5-  
801 IRSTEELNIQLSGSESSGSRGSQDFYPKWRESKLFITDEEVGP EETETDT kcnq5-  
792 IRSTEELNIQLSGSESSGSRGSQDFYPKWRESKLFITDEEVGP EETETDT kcnq5-  
851 FDAAPQPA REAAAFASDSLRTGRSRSSQSICKAGESTDALS LPHVKLK kcnq5-  
842 FDAAPQPA REAAAFASDSLRTGRSRSSQSICKAGESTDALS LPHVKLK kcnq5-

Decoration 'Decoration #1': Shade (with solid black) residues that match kcnq5-1.PRO

Figure 1

1 MKDVE SGRGRVLLNSAAARGDGLLLLGTRAATLGGGGGLRESRRGKQGARMSSLLGKPLS kcnq5.PR  
1 MVQ-KSRNGGVYPGFSGEKKLVGVFVGLDGPAPDSTRDGAALLIAGSEAPKRGSI LSKPRA fKCNQ2.PR  
1 MAEAPPRLGLGPPPGDAPRAELVALTAVQSEQGEAGGGGSPRRLGLLGSPLP-PGAPLP fKCNQ4.pr

61 - - - YTSQSQR - - - - NVK YRRVQNY LYNVLERPRGWAFIYHAFVFLLVFGCLILSVFS kcnq5.PR  
60 G-GAGAGKPKKRNAP - - - - YRKLNQFLYNVLERPRGWAFIYHAYVFLLVFSCLVLSVFS fKCNQ2.PR  
60 GPGSGSGSACGQRSSAAHKRYRRLQNWVYNVLERPRGWAFVYHVFIFLLVFSCLVLSVLS fKCNQ4.pr

113 TIFEHTKLASSCLLILEFVMIVVFGLEFIIRIWSAGCCCRYRGWQGRLLRFARKPFPCVIDT kcnq5.PR  
114 TIKEYEKSSEGALEYILEIVTIVVFGVEYFVRIWAAGCCCRYRGWRGRLLKFAARKPFPCVIDI fKCNQ2.PR  
120 TIQEHQELANECLLILEFVMIVVFGLEYIVRVWSAGCCCRYRGWQGRFRFARKPFPCVIDF fKCNQ4.pr

173 IVLIASIAVVS AKTQGNIFATSALRSRLRFLQILRMVRMDRRGGTWWKLLGSVVYAHSKELI kcnq5.PR  
174 MVLIASIAVL AAGSQGNVFATSALRSRLRFLQILRMIRMDRRGGTWWKLLGSVVYAHSKELV fKCNQ2.PR  
180 IVFVASVAVI AAGTQGNIFATSALRS MRFLQILRMVRMDRRGGTWWKLLGSVVYAHSKELI fKCNQ4.pr

233 TAWYIGFLVLIFS SFLVYLVEKDANK E FSTYADALWWGTITLTITIGYGDKTE L TWLGRLL kcnq5.PR  
234 TAWYIGFLCLILASFLVYLAEK GENDH FDTYADALWWGLITLTITIGYGDKYPTWN GRLL fKCNQ2.PR  
240 TAWYIGFLVLIFASFLVYLAEKDANS D FSSYADSLWWGTITLTITIGYGDKTEHTWLGRVL fKCNQ4.pr

293 SAGFALLGISFFALPAGILGSGFALKVQEQHRQKHFEKRRNPAAANLIQ CVWRSYAAD - EK kcnq5.PR  
294 AATFTLIGV SFFALPAGILGSGFALKVQEQHRQKHFEKRRNPAA GLIQSAWRFYATNLSR fKCNQ2.PR  
300 AAGFALLGISFFALPAGILGSGFALKVQEQHRQKHFEKRRMPAANLIQA AAWRLYSTDM SR fKCNQ4.pr

352 SVSIATW - - - - - KPHLKA - LH - - - - - kcnq5.PR  
354 TDLHSTWQYYERTVTVP MYRLIPPL - NQLELLRNLSKSG LAFRKDPPEPSPS - - - - - fKCNQ2.PR  
360 AYLTATWY YYDSIL - - - - - PSFRELALLFEHVQARNGGLRP - LEVRRAPVPDGA PSRYPPVA fKCNQ4.pr

367 TCSPTKKEQGEASSQKLSFKERVMA SP - - RGQSIKSRQASVGD RRSPS TDI TAEG - SP kcnq5.PR  
407 - - - - - QKVS LKDRV - FSSPRGVAAKKGSPQAQT VRRSPSADQSLED - SP fKCNQ2.PR  
417 TCHRP GSTSFCPGESSRMGI KDRIRMGSSQRRTGPS KQQLAPPTMPTSPSS EQVGEATSP fKCNQ4.pr

424 TKVQKSWSFNDRTFR PSLRLKSSQPKFVIDAD TALGTDDVYDEKGCQCDVSVEDLTPEPL kcnq5.PR  
450 SKVPKSWSF GDRSRA RQA FR IKGAASRQNSE - EASLPGEDIVDDKSCPCFVTEDLTPEGL fKCNQ2.PR  
457 TKVQKSWSFNDRTFRASLRL - - - - - KPRTSAEDA - PSSEVAE EKS YQCELTVD DIMPAV fKCNQ4.pr

484 KTVIRAIRIMKFHVAKRKFKETLRPYDVKD VIEQYSAGHLDMLCRIKSLQTRVDQILGKG kcnq5.PR  
509 KVSIRAVCVMRFLVSKRKFKESLRPYDVM D VIEQYSAGHLDMLSRIKSLQSRVDQIVGRG fKCNQ2.PR  
511 KTVIRSIRILKFLVAKRKFKETLRPYDVKD VIEQYSAGHLDMLGRIKSLQTRVDQIVGRG fKCNQ4.pr

544 QITS DKKSREKIT - - - AEHETTDDL SMLGRVVKVEKQVQSIESKLDCLLDIYQOVLRKGS kcnq5.PR  
559 PAITDKDR - - - - - TKGPAAEALPEDPSMMGR LGKVEKQVLSMEKKLDFLVNIYMQ - - - - - RMGI fKCNQ2.PR  
591 P - - GDRKAREKGDKGPSDAEVVDEI SMMGRVVKVEKQVQSIEHKLDDL LGFYSRCLRS GT fKCNQ4.pr

601 ASALALAS FQFPFCEQTS DYQSPVDSKDL S GSAQNS GCLSRSTSANISRGLQFILT PN kcnq5.PR  
623 PPTETEAYFGAK - - - EPEPAPPYHSPEDSRE - - - - - HVD RHGCIVKIVRSSSSTG - - - - - QK fKCNQ2.PR  
649 SAS LG - - AVQVPLFPDI TSDYHSPVDHEDISVSAQT - - - - - fKCNQ4.pr

661 EFSAQTFYALSPTMHSQATQVPIS QSDGSAVAATNTIANQINTAPKPAAPTTLQITPPLP kcnq5.PR  
672 NFSAP - - - PAAPPVQCPPSTSWQP QSHPRQGHGTSPVGDH - - - - - GSLVRI PPPPA fKCNQ2.PR  
684 - - - - - fKCNQ4.pr

721 AIKHLPRPETLHPNPAGLQESISDVTTCLVASKENVQVAQSNLT KDRSMRKS FDMGGETL kcnq5.PR  
720 HERSLSAYGGGNRASMEFL - RQEDTPGC - - - - - RPPEGTL - - - - - RDSDT S fKCNQ2.PR  
684 - - - - - fKCNQ4.pr

781 LSVCPMV PKDLGKSLSVQNLIIRSTEELNIQLSGSESSGSRGSQDFYPKWRESKLFITDEE kcnq5.PR  
760 LISIPSV DHEELER SFSGFSISQSKENLD - ALNSCYAAVAPCAK - - - - - VRPYIAEGE fKCNQ2.PR  
684 LISISRSVSTNM - - - - - fKCNQ4.pr

841 VGPEETETDTFDAAFPQPARAAAFAS DSLRTGRSRSSQSICKAGESTDALSLPHVKLK . kcnq5.PR  
811 SDTDSDLCTPCGPPERSATGEGPFGDVGWAGPRK fKCNQ2.PR  
695 - - - - - D fKCNQ4.pr

Decoration 'Decoration #1': Shade (with solid black) residues that match the Consensus

Figure 2

Fig. 3 A.)

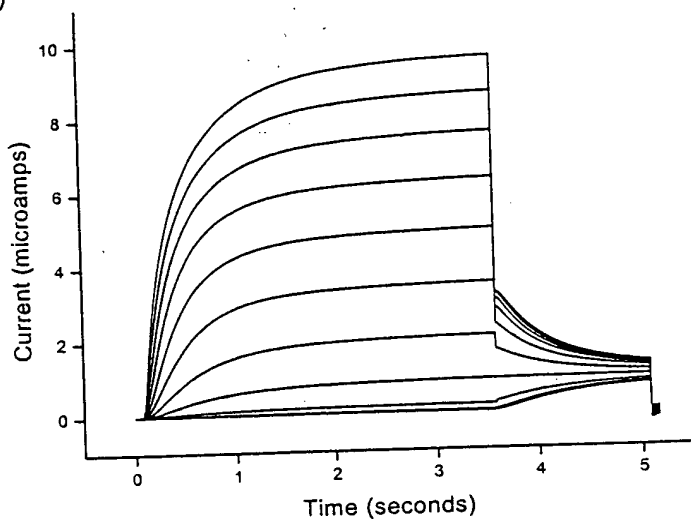


Fig. 3 B.)

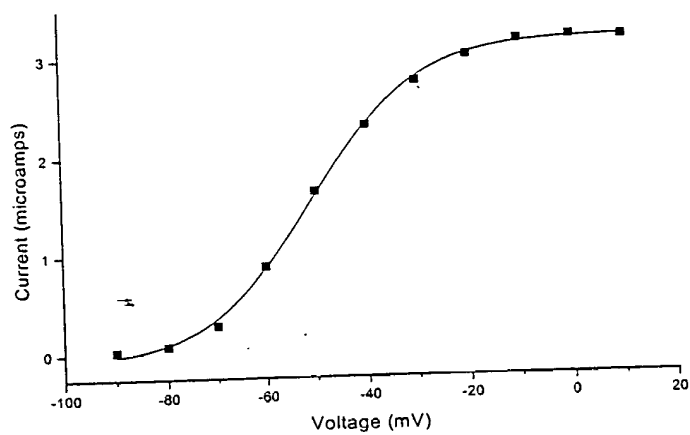


Figure 3

SCANNED, # 6

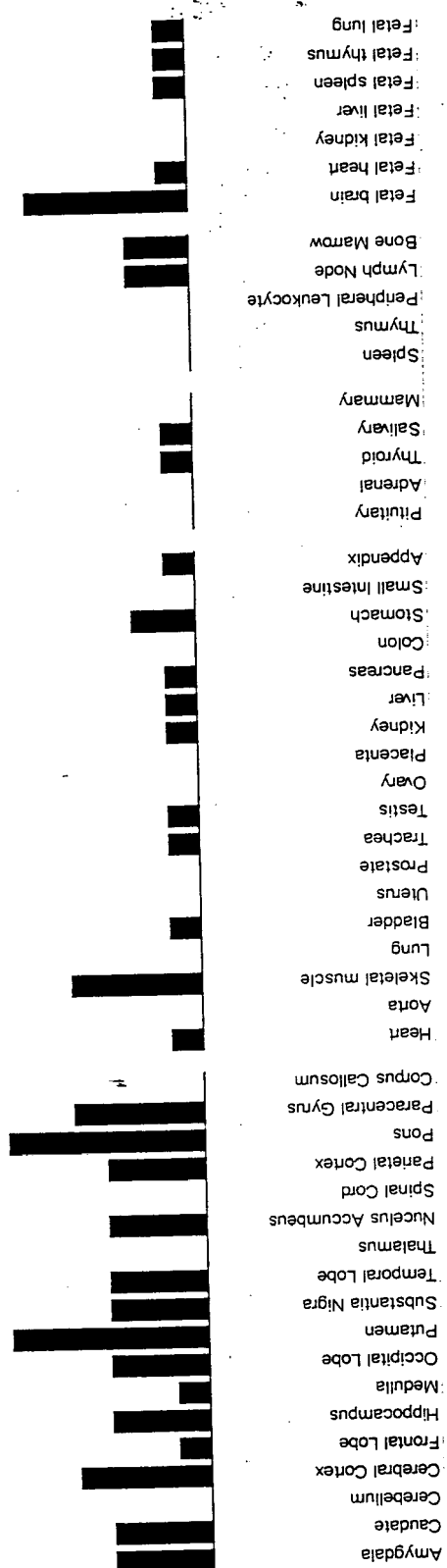


Figure 4